Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 (currently amended). Biometric, acoustic writing system having: (a) a pen housing for making hand-guided movements on a substrate; (b) at least one microphone, which is integrated in the pen housing, for acoustic recording of sound signals which are caused by the hand-guided movements; characterized by (c) having a data processing unit ~~for calculation of~~ to calculate biometric data for personal identification as a function of sound signals that are recorded by said microphone from the hand-guided movements.

2 (currently amended). Biometric, acoustic writing system according to claim 1, characterized in that the data processing unit is also provided for obtaining biometric features and for reconstruction of handwritten characters and texts from the recorded sound signals.

3-4 (cancelled).

5 (previously presented). Biometric, acoustic writing system according to claim 1, characterized in that a pen is provided in the pen housing, the substrate is a fixed writing substrate which has a specific pronounced surface roughness and hardness, the hand-guided movement is a writing movement and the pen, when placed on the substrate, is capable of creating friction on the substrate during the hand-guided writing movement, thereby producing an acoustic writing noise, which is capable of being transmitted to the microphone, as a structure-borne sound signal via the pen and as an airborne sound signal via surrounding air.

6 (previously presented). Biometric acoustic writing system according to claim 5, characterized in that the microphone is mechanically coupled to the pen in order to

transmit the structure-borne sound signal.

7 (previously presented). Biometric, acoustic writing system according to claim 5, characterized in that the microphone is mechanically coupled to a sound body, which is connected to the pen, in order to transmit the structure-borne sound signal.

8 (previously presented). Biometric, acoustic writing system according to claim 7, characterized in that the sound body is in the form of a resonator for specific natural frequencies.

9 (cancelled).

10 (previously presented). Biometric, acoustic writing system according to claim 1, characterized in that the microphone is arranged in an air bearing sound chamber, which is provided in the pen housing with the air bearing sound chamber being in a form of a resonator for specific natural frequencies.

11 (previously presented). Biometric, acoustic writing system according to claim 10, characterized in that an interchangeable pen refill with an ink filling is provided as a pen in the pen housing, and the microphone and the resonator are surrounded by sound insulation, which is intended to attenuate environmental noise and passes sound signals only via the writing refill.

12-13 (cancelled).

14 (previously presented). Biometric, acoustic writing system according to claim 5, characterized in that, when the housing opening is open, the microphone acoustically records the internal and external writing noise which is caused by the hand-guided writing movement as a structure-borne and airborne sound signal or acoustically records a speech

signal which originates from a person or both.

15-18 (cancelled).

19 (previously presented). Biometric, acoustic writing system according to claim 1, characterized in that the writing substrate is composed of any desired paper.

20-22 (cancelled).

23 (previously presented). Biometric, acoustic writing system according to claim 1, characterized in that a pen is provided in the pen housing, and a pressure sensor device is additionally provided, which records a static writing pressure and a dynamic writing pressure in at least one spatial direction of the pen when the pen is placed on the substrate and hand-guided.

24-44 (cancelled).

45 (previously presented). Biometric writing system according to claim 23, characterized in that the pressure sensor device comprises piezoelectric sensors, piezoresistive sensors, force-sensitive resistances, magnetic sensors, or a combination thereof.

46-48 (cancelled).

49 (previously presented). Biometric writing system according to claim 1, characterized in that the data processing unit is integrated in the pen housing or in an external receiving unit.

50-51 (cancelled).

52 (previously presented). Biometric writing system according to claim 1, characterized in that a scrambling unit (17) is provided in the pen housing (3) in order to scramble reference data.

53 (cancelled).

54 (previously presented). Biometric writing system according to claim 1, characterized in that a data memory is provided for storage of biometric reference data, and of data for handwritten characters, texts and spoken speech.

55 (previously presented). Biometric writing system according to claim 54, characterized in that the biometric reference data is calculated by the data processing unit from sound signal data which is recorded while writing and speaking at least one word, from optical movement data, from mechanical oscillation and pressure data, and from inclination data, and is stored in a reference data memory.

56-64 (cancelled).

65 (previously presented). Biometric writing system according claim 55, characterized in that the data processing unit is integrated with a local computer having a computer data processing unit, and the data processing unit and the computer data processing unit compare the calculated current biometric data with the stored biometric reference data in order to verify and identify it.

66 (currently amended). Biometric writing system according to claim 65, characterized in that the data processing unit and the computer data processing unit produce [[an]] a personal identification indication signal, a personal verification indication signal, or a combination thereof when the current biometric data largely matches the stored reference data.

67 (previously presented). Biometric writing system according to claim 66, characterized in that the data processing unit and the computer data processing unit identify the current biometric data as a stolen copy of the stored reference data, and produce a warning signal, if the current biometric data completely matches the stored biometric reference data.

68-69 (cancelled).

70 (previously presented). Biometric writing system according to claim 55, characterized in that single characters which are currently being written are reconstructed by means of the stored biometric reference data for a person who has been identified or verified via the handwritten input.

71 (withdrawn). Method for generation of personal-specific biometric reference data having the following steps: (a) acoustic recording of hand-guided writing movements which are carried out by a person using a pen on a substrate while writing a character, a word or a word sequence, and production of corresponding sound signal data; (b) storage of the sound signal data that is produced, as a digital sound time signal; (c) simultaneous recording of writing pressure signal data for the writing pressure, which data is transmitted from the pen to at least one pressure sensor; (d) storage of the writing pressure signal data that is produced as digital time signals; (e) calculation of frequency spectra as a spectrogram from the stored time-segmented sound and pressure time signals by means of a fast Fourier transformation; (f) determination of amplitude time signals of selected frequencies in order to record amplitude dynamics in the calculated spectrogram, of the sound and pressure time signals; (g) calculation of an associated frequency spectrum from the selected amplitude time signals by means of fast Fourier transformation; (h) determination of first biometric data by means of feature extraction from the sound intensity of the digital time signals; (i) determination of second biometric data by means of feature extraction from the pressure time signals; (j) determination of third current

biometric data by means of feature extraction from the calculated frequency spectra of the acoustic amplitude from the time signals; (k) determination of fourth biometric data by means of feature extraction from the calculated frequency spectra for the amplitude time signals of the dynamic writing pressure data.

72-79 (cancelled).

80 (withdrawn). Method according to claim 71, characterized in that biometric reference data is determined in a training phase and current biometric data is determined in an operating phase, from the acoustic writing signal data and the writing pressure signal data for corresponding characters, sketches or words, and the biometric reference data and the current biometric data are stored.

81-86 (cancelled).

87 (withdrawn). Method for verification and identification of a person, having the following steps: (a) comparison of the current biometric data with stored biometric reference data for that person in order to verify whether the current biometric data largely matches stored biometric reference data for that person; (b) comparison of the current biometric data with stored biometric reference data for a large number of people in order to identify whether the current biometric data largely matches the stored biometric reference data for one of the stored people.

88 (withdrawn). Method according to claim 80, characterized in that a speech signal which originates from the person is additionally acoustically recorded, and corresponding sound signal data is produced.

89 (withdrawn). Method according to claim 87, characterized in that the biometric data from the speech signal data is evaluated in conjunction with the writing signal data, for

verification and identification.

90 (withdrawn). Method according to claim 71, characterized in that a fingerprint which originates from the person is additionally recorded via a tactile sensor which is integrated in a pen sleeve, and corresponding biometric fingerprint data is produced.

91 (withdrawn). Method according to claim 90, characterized in that biometric data from the writing signal data and speech signal data is evaluated in conjunction with the fingerprint data, for verification and identification.

92-96 (cancelled).

97 (withdrawn). Method according to claim 87, characterized in that a speech signal which originates from the person is additionally acoustically recorded, and corresponding sound signal data is produced.

98-101 (cancelled).

102 (withdrawn). Method according to claim 90, characterized in that characters or words which are obtained from the acoustic handwriting identification are evaluated using biometric data from the writing signals, speech signals or fingerprints for verification and identification, the identification being biometric pin identification.

103 (withdrawn). Method according to claim 88, characterized in that the acoustic handwriting and the speech identification are integrated in one writing system, and methods for text identification therefrom are combined with one another.

104-114 (cancelled).